

CLAIMS

- 1 1. A method of performing persistent storage comprising:
- 2 A) receiving a received record in received RTP packets, of which each
- 3 includes a received RTP payload and a respective received RTP
- 4 timestamp; and
- 5 B) in response to the received record, storing in a persistent medium a
- 6 stored record as stored packets of which each corresponds to a re-
- 7 spective one of the received RTP packets, each stored packet in-
- 8 cluding the RTP payload contained in the respective received RTP
- 9 packet and further including a respective stored RTP timestamp de-
- 10 rived from the corresponding received RTP packet's received RTP
- 11 timestamp.
- 1 2. A method as defined in claim 1 wherein the stored RTP timestamp in each
- 2 stored packet equals the received RTP timestamp contained in the respective
- 3 received RTP packet.
- 1 3. A method as defined in claim 2 wherein the format of the stored packet is
- 2 that of the corresponding received RTP packet.
- 1 4. A method as defined in claim 1 wherein:
- 2 A) the received and stored records contain audio data; and
- 3 B) the method further includes retrieving the stored record and playing
- 4 it in accordance with the stored timestamps contained therein.
- 1 5. A method as defined in claim 1 wherein:
- 2 A) the received and stored records contain video data; and
- 3 B) the method further includes retrieving the stored record and playing
- 4 it in accordance with the stored timestamps contained therein.

- 1 6. A method as defined in claim 5 wherein the method additionally includes:
2 A) receiving a second received record in second RTP packets con-
3 taining audio data, each second RTP packet including a received
4 RTP payload and a respective received RTP timestamp;
5 B) in response to the second received record, storing in the persistent
6 medium a second stored record as second stored packets of which
7 each corresponds to a respective one of the second received RTP
8 packets, each second stored packet including the RTP payload
9 contained in the respective received RTP packet and further in-
10 cluding a respective stored RTP timestamp derived from the corre-
11 sponding second received RTP packet's received RTP timestamp;
12 C) retrieving the second stored record; and
13 D) playing the second stored record simultaneously with the first-
14 mentioned stored record in accordance with the stored timestamps
15 contained in the second stored record.

- 1 7. A method as defined in claim 1 further including retrieving the stored rec-
2 ord and transmitting in accordance with the timestamp in each recorded packet a
3 corresponding transmitted RTP packet including a transmitted RTP timestamp
4 and including a payload the same as that of the recorded packet to which that
5 transmitted packet corresponds.

- 1 8. A method of performing persistent storage comprising:
2 A) taking samples of time-dependent data; and
3 B) storing a record of the data in a persistent medium as stored RTP
4 packets whose payloads represent the samples' values and whose
5 timestamps represent the times at which the first samples in their
6 respective payloads were taken.

- 1 9. A method as defined in claim 8 wherein:
2 A) the sampled data are audio data; and

7 C) a persistent-store driver that responds to the receiver by storing in
8 the persistent medium a stored record as stored packets of which
9 each corresponds to a respective one of the received RTP packets,
10 each stored packet including the RTP payload contained in the re-
11 spective received RTP packet and further including a respective
12 stored RTP timestamp derived from the corresponding received
13 RTP packet's received RTP timestamp.

1 15. An apparatus as defined in claim 14 wherein the format of the stored
2 packets are those of the corresponding received RTP packets.

A) the received and stored records contain audio data;

B) the persistent-store driver also retrieves the stored record; and

C) the apparatus further includes an audio player and an audio driver that drives the audio player to play the stored record in accordance with the stored timestamps contained therein.

2 A) the received and stored records contain video data;
3 B) the persistent-store driver also retrieves the stored record; and
4 C) the apparatus further includes a video player and a video driver that
5 drives the video player to play the stored record in accordance with
6 the stored timestamps contained therein.

- 1 18. An apparatus as defined in claim 17 wherein:
2 A) the receiver additionally receives a second received record in sec-
3 ond RTP packets containing audio data, each second RTP packet
4 including a received RTP payload and a respective received RTP
5 timestamp;
6 B) in response to the receiver's receiving the second received record,
7 the persistent-store driver stores in the persistent medium a second
8 stored record as second stored packets of which each corresponds
9 to a respective one of the second received RTP packets, each sec-
10 ond stored packet including the RTP payload contained in the cor-
11 responding received RTP packet and further including a respective
12 stored RTP timestamp derived from the corresponding second re-
13 ceived RTP packet's received RTP timestamp;
14 C) the persistent-store driver also retrieves the second stored record;
15 and
16 D) the apparatus further includes an audio player and an audio driver
17 that drives the audio player, simultaneously with the video driver's
18 driving of the video player, to play the thus-retrieved second stored
19 record in accordance with the stored timestamps contained therein.
- 1 19. An apparatus as defined in claim 13 wherein:
2 A) the persistent-store driver also retrieves the stored record; and
3 B) the apparatus further includes a transmitter that transmits in accor-
4 dance with the timestamp in each thus-retrieved recorded packet a
5 corresponding transmitted RTP packet that both includes a trans-
6 mitted RTP timestamp and includes a payload the same as that of
7 the recorded packet to which that transmitted packet corresponds.

- 1 20. For storing time-dependent data, an apparatus comprising:
2 A) a persistent medium operable to store data and retrieve data thus
3 stored;
4 B) a sampler that produces a sampled record by taking samples of a
5 time-dependent function; and
6 C) a persistent-store driver that responds to the sampler by storing in
7 the persistent medium a stored record as stored RTP packets
8 whose payloads represent the samples' values and whose time-
9 stamps represent the times at which the first samples in their re-
10 spective payloads were taken.
- 1 21. An apparatus as defined in claim 20 wherein:
2 A) the sampled data are audio data;
3 B) the persistent-store driver also retrieves the stored record; and
4 C) the apparatus further includes an audio player and an audio driver
5 that drives the audio player to play the stored record in accordance
6 with the thus-retrieved stored timestamps contained therein.
- 1 22. An apparatus as defined in claim 20 wherein:
2 A) the sampled data are video data;
3 B) the persistent-store driver also retrieves the stored record; and
4 C) the apparatus further includes a video player and a video driver that
5 drives the video player to play the thus-retrieved stored record in
6 accordance with the stored timestamps contained therein.
- 1 23. An apparatus as defined in claim 22 wherein:
2 A) the sampler additionally produces a second sampled record by
3 taking audio samples of a sound signal;
4 B) the persistent-store driver additionally responds to the sampler by
5 storing in the persistent medium a second stored record as stored
6 RTP packets whose payloads represent the audio samples' values

7 and whose timestamps represent the times at which the first audio
8 samples in their respective payloads were taken; and
9 C) the apparatus further includes an audio player and an audio driver
10 that retrieves the second stored record and drives the audio player;
11 simultaneously with the video driver's driving of the video player, in
12 accordance with the stored timestamps contained in the second
13 stored record.

1 24. An apparatus as defined in claim 20 wherein:
2 A) the persistent-store driver also retrieves the stored record; and
3 B) the apparatus further includes a transmitter that transmits in accor-
4 dance with the timestamp in each thus-retrieved recorded packet a
5 corresponding transmitted RTP packet that both includes a trans-
6 mitted RTP timestamp and includes a payload the same as that of
7 the recorded packet to which that transmitted packet corresponds.